NPDES PERMIT NO. NM0028436
STATEMENT OF BASIS

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

APPLICANT: Pojoaque Terrace Mobile Home Park
27 County Road 103
Santa Fe, NM 87506

ISSUING OFFICE: U. S. Environmental Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

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PERMIT ACTION: Proposed reissuance of the current National Pollutant Discharge Elimination System (NPDES) permit issued August 26, 2003, with an effective date of October 1, 2003, and an expiration date of October 31, 2005.

DATE PREPARED: August 7, 2006

40 CFR CITATIONS: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of January 4, 2006.

CERTIFICATION: The permit is in the process of certification by the Pueblo of Pojoaque agency following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the New Mexico Environment Department, Pueblo of San Ildefonso, District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service; and to the National Marine Fisheries Service prior to the publication of that notice.

FINAL DETERMINATION: The public notice describes the procedures for the formulation of final determinations.

I. PROPOSED CHANGES FROM PREVIOUS PERMIT

It is proposed that the current permit be reissued for a 4-year term. This 4-year term permit will coordinate with the EPA Basin Statewide Management Approach to Permitting in New Mexico, adopted March 2, 2000. This program, also known as the Statewide Basin Management Approach to permitting, is a comprehensive framework to better coordinate and integrate water resource management activities geographically by river basin. Regulations at 40 CFR 122.46 (c) allow EPA to issue any permit for a duration that is less than the full allowable 5 year term.

There are no proposed changes from the current permit issued August 26, 2003, with an effective date of October 1, 2003 and an expiration date of October 31, 2005.

II. APPLICANT ACTIVITY

Under the Standard Industrial Classification (SIC) Code 6515, the applicant operates as a mobile home site. The treatment process includes an extended activated sludge process with secondary clarification, chlorination, and dechlorination. Sludge is wasted to a holding tank and disposed off site through a contracting firm. The facility operates a modified extended aeration type treatment of the activated sludge process with a design capacity of 0.018 million gallons per day (MGD).

III. DISCHARGE LOCATION

As described in the application, the facility is located at 27 County Road 103, in Santa Fe County, New Mexico. The effluent from the treatment plant is discharged into Pojoaque Creek, thence the Pojoaque River within the exterior boundaries of the Pueblo of Pojoaque, upstream from that portion of the river also designated as Segment No. 20.6.4.114 of the upper Rio Grande Basin. The single outfall of the facility is located at:

Latitude: 35° 53' 55" North, Longitude: 106° 01' 35" West

Based on the minimal flow of 0.018 MGD from the facility, and the 2.5 miles between the facility and Pueblo of Pojoaque boundary, it is the best professional judgment (BPJ) of the permit writer that the discharge would not reach state of New Mexico waters. Therefore, the proposed permit is established to comply with Pueblo of Pojoaque Water Quality Standards.

IV. RECEIVING WATER USES

The effluent from the treatment plant is discharged into Pojoaque Creek, thence the Pojoaque River within the exterior boundaries of the Pueblo of Pojoaque, upstream from that portion of the river also designated as Segment No. 20.6.4.114 of the upper Rio Grande Basin. The designed uses of the receiving stream, according to the 1999 Revised Pueblo of Pojoaque Water Quality Standards are:

Irrigation
Primary Contact
Marginal Coldwater Fisheries
Groundwater Recharge
Livestock Watering
Wildlife Habitat

V. DISCHARGE DESCRIPTION AND OPERATIONS

A. DISCHARGE DESCRIPTION

A quantitative description of the discharge(s) is described in the EPA Permit Application Form 2E and in Discharge Monitoring Reports (DMRs) from December 2003 to December 2005. The facility submitted information in its application that describes the nature of the permitted discharge. The following is a summarization of the information provided for the non-toxic pollutants.

Parameter	avg (mg/l unless noted)	max
Flow, million gallons/day (MGD)	0.009	0.017
Temperature, winter	---	---
Temperature, summer	---	---
pH, minimum, standard units (SU)	---	6.9 su
pH, maximum, standard units (SU)	---	7.6 su
Biochemical Oxygen Demand, 5-day (BOD(5))	5.2	7
Fecal Coliform (FCB) (bacteria/100 ml)	18.8	76
Total Suspended Solids (TSS)	7.8	13
Chlorine, Total Residual (TRC)	0.17	0.34

VI. TENTATIVE DETERMINATION

On the basis of preliminary staff review and after consultation with the Pueblo of Pojoaque, the Environmental Protection Agency has made a tentative determination to reissue the permit for the discharge described in the application.

VII. PROPOSED PERMIT CONDITIONS

The specific effluent limitations and/or conditions will be found in the proposed permit.

VIII. DRAFT PERMIT RATIONALE

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other necessary explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under 40 CFR 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. REASON FOR PERMIT ACTION

The current permit was issued August 26, 2003, with an effective date of October 1, 2003 and an expiration date of October 31, 2005. The permit renewal application was dated March 27, 2005.

It is proposed that the current permit be reissued for a 4-year term following regulations promulgated at 40 CFR 122.46(c).

B. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at 40 CFR 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR 122.44(a) or on Tribal water quality standards and requirements pursuant to 40 CFR 122.44(d), whichever are more stringent.

Technology-based effluent limitations are established in the proposed permit for the following pollutants:

TSS
BOD_5

Water quality-based effluent limitations are established in the proposed permit for the following pollutants:

Total residual chlorine (TRC)
Fecal coliform bacteria
pH

C. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at 40 CFR 122.44(a) require technology-based effluent limitations to be placed in NPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgment) in the absence of guidelines, or on a combination of the two.

2. Effluent Limitations

The facility has a current design flow capacity of 0.018 million gallons per day (MGD).

The following technology-based effluent limitations are proposed:

Final Technology-Based Effluent Limits – 0.018 MGD design flow

Effluent Characteristics	Discharge Limitations			
	30-day Avg lbs/day	7-day Avg lbs/day	30-day Avg mg/l or Other Units (Specify)	7-day Avg mg/l or Other Units (Specify)
Flow	N/A	N/A	Measure (MGD)	Measure (MGD)
BOD_5	4.5	6.8	30 mg/l	45 mg/l
TSS	4.5	6.8	30 mg/l	45 mg/l
pH	N/A	N/A	6.0-9.0 su	N/A

The mass loadings for BOD_5 and TSS are based on the design flow of 0.018 MGD as calculated below:

30 mg/l * 8.34 lb/gal * 0.018 MGD = 4.5 lbs/day

45 mg/l * 8.34 lb/gal * 0.018 MGD = 6.8 lbs/day

The draft permit establishes technology-based effluent limitations for BOD_5 and TSS based on those established in the effluent limitations guidelines applicable to the process wastewater.

3. Monitoring Frequencies for Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity 40 CFR 122.48(b) and to assure compliance with permit limitations contained in 40 CFR 122.44(i)(1). For both interim and final limits, the monitoring frequency is proposed to be the same frequency as the previous permit.

PARAMETERS	MONITORING REQUIREMENTS	
	FREQUENCY OF SAMPLE	REPORTING TYPE
BOD_5-day	Once/Month	Grab
TSS	Once/Month	Grab

4. Sludge Disposal

Requirements for facilities treating domestic sewage include, but are not limited to, treatment technologies, sludge requirements, operation, reporting requirements and wastewater pollution prevention requirements.

The permittee shall use only those sewage sludge disposal or reuse practices that comply with the federal regulations established in 40 CFR Part 503 "Standards for the Use or Disposal of Sewage Sludge." The specific requirements in the permit apply as a result of the design flow of the facility, the type of waste discharge to the collection system, and the sewage sludge disposal or reuse practice utilized by the treatment works. Sludge testing information, that is required of handling or disposing of the sludge, will be retained on site for five years, as required in the record keeping requirements section of Part IV, in accordance with NPDES Permit No. NM0028436.

5. Pretreatment

The facility has no significant industrial users, therefore, EPA has determined that the permittee will not be required to develop a full pretreatment program.

D. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Effluent limitations and/or conditions established in the draft permit are in compliance with Tribal water quality standards and the applicable water quality management plan.

2. Post Third Round Policy and Strategy

Section 101 of the Clean Water Act (CWA) states that "...it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited..." To insure that the CWA's prohibitions on toxic discharges are met, EPA has issued a "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants (49 FR 9016-9019, 3/9/84)." In support of the national policy, Region 6 adopted the "Policy for Post Third Round NPDES Permitting" and the "Post Third Round NPDES Permit Implementation Strategy" on October 1, 1992. The Regional policy and strategy are designed to insure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State/Tribal water quality standard resulting in nonconformance with the provisions of 40 CFR 122.44(d); (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

3. Implementation

The Region is currently implementing its post third round policy in conformance with the Regional strategy. The NPDES permit contains technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. Tribal narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

4. Tribal Water Quality Numerical Standards

(a) General Comments

As stated above, the designated uses of the receiving stream are irrigation, primary contact, marginal coldwater fisheries, groundwater recharge, livestock watering, and wildlife habitat use.

(b) Reasonable Potential

All POTW’s are required to fill out appropriate sections of the Form 2A, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to Publicly Owned Treatment Works (POTW’s) and to facilities that are similar to POTW’s, but which do not meet the regulatory definition of “publicly owned treatment works” (like private domestics, or similar facilities on Federal property). The forms were designed and promulgated to “make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities,” per the summary statement in the preamble to the Rule. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL.

The amount of information required for minor facilities was limited to specific sections of these forms, because they are unlikely to discharge toxic pollutants in amounts that would impact state/tribal water quality standards. Supporting information for this decision was published as "Evaluation of the Presence of Priority Pollutants in the Discharges of Minor POTW's," June 1996, and was sent to all state NPDES coordinators by EPA Headquarters. In this study, EPA collected and evaluated data on the types and quantities of toxic pollutants discharged by minor POTW's of varying sizes from less than 0.1 MGD to just under 1 MGD. The Study consisted of a query of the EPA Permit Compliance System (PCS) database from 1990 to present, an evaluation of minor POTW data provided by the State agencies, and on-site monitoring for selected toxics at 86 minor facilities across the nation.

PCS and the study showed that minor POTW's below 0.1 MGD comprise 40 % of all POTW's that serve very small communities and contribute a small amount of flow, generally with no industrial users. Of the facilities sampled in the study, which discharged one of the priority pollutants screened, all tested near or lower than the most stringent national water quality criterion. The most commonly detected pollutants were total phenolics (at 100% of facilities), zinc (at 92% of facilities), copper (at 64% of facilities), and lead (at 32.6% of facilities), with other pollutants detected at less than 10% of the study facilities, and with beryllium, mercury, and cyanide not detected at any of the facilities. Comparison of the effluent pollutant concentration data directly to water quality criteria did not take into account dilution, and did not consider other site specific factors such as hardness, temperature, turbidity, salinity, etc. This was considered an overly conservative approach by the study, but used as such to illustrate the extremely low reasonable probability these facilities had to violate state/tribal water quality standards. Due to the information supplied in the application, the Agency has determined that no reasonable potential exists for this discharge to violate applicable Pueblo of Pojoaque Water Quality Standards.

(c) Water Quality-Based Limits

Effluent limitations and/or conditions established in the proposed permit are in compliance with the Pueblo of Pojoaque Water Quality Standards. In the absence of specified Pueblo of Pojoaque Implementation Strategy, this permit is consistent with part II.C of the U. S. Environmental Protection Agency, Region 6 Post Third Round NPDES Permit Implementation Strategy adopted October 1, 1992. Based on the minimal flow of 0.018 MGD from the facility, and the 2.5 miles between the facility and Pueblo of Pojoaque boundary, it is the best professional judgment (BPJ) of the permit writer that the discharge would not reach state of New Mexico waters.

(1) Total Residual Chlorine

Regulations promulgated at 40 CFR 122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based).

Information submitted in the application indicates that for the existing plant, bacteria disinfection is currently achieved through chlorination. Chlorine, a known toxicant, if untreated, is likely to cause exceedances of numerical and narrative Water Quality Standards contained in Subsection E, Paragraph 4 of Section IV of the Pueblo of Pojoaque Water Quality Standards. TRC shall be limited in the draft permit based on the previous permit.

The draft permit will continue the limitation of 3 ug/l based on the current permit as follows:

"Prior to final disposal, the effluent shall contain NO MEASURABLE total residual chlorine (TRC) at any time. NO MEASURABLE will be defined as no detectable concentration of TRC as determined by any approved method established in 40 CFR 136. If during the term of this permit the minimum quantification level for TRC becomes less than 3 ug/l, then 3 ug/l shall become the effluent limitation. The maximum TRC shall be monitored by grab sample on a daily basis."

(2) Bacteria

Pueblo of Pojoaque Water Quality Standards for Fecal Coliform Bacteria, require the monthly geometric mean to be 200 colony forming units (cfu)/100 ml or less; single sample 400 cfu/100 ml or less.

(3) Other Conditions

Floatables are prohibited from discharge through this outfall.

The pH range of 6.6-8.8 standard units for Pueblo of Pojoaque Waters established by the current Pueblo of Pojoaque Water Quality Standards is more stringent than the pH range of 6.0-9.0 standard units specified by technology-based effluent limitations. Therefore, 6.6-8.8 standard units shall be the effluent limitation for this facility.

(4) Schedule of Compliance

None

IX. IMPAIRED WATER- 303(D) LIST

The Pueblo of Pojoaque has not evaluated the segment of the Pojoaque River within Tribal boundaries. Until the water is assessed, additional permit action is not required. A reopener clause will allow permit conditions to be addressed if and when the Pueblo assess the receiving water, and additional permit limits are required

X. ANTIDEGRADATION

The Pueblo of Pojoaque revised Pueblo of Pojoaque Water Quality Standards Section II "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect existing uses through implementation of the Pueblo of Pojoaque revised water quality standards. The limitations and monitoring requirements set forth in the proposed permit are developed from the Pueblo of Pojoaque Water Quality Standards and are protective of those designed uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. There is no increase of pollutants being discharge to the receiving waters authorized in the proposed permit.

XI. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if relevant portions of the Pueblo of Pojoaque Water Quality Standards are revised or remanded. In addition, the permit may be reopened and modified during the life of the permit if relevant procedures implementing the Water Quality Standards are either revised or promulgated by the Tribe. This permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that approved Tribal standards in accordance with 40 CFR 122.44(d). Modification of the permit is subject to the provisions of 40 CFR 124.5.

XII. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet Antibacksliding provisions of the Clean Water Act, Section 402(o) and 40CFR122.44(l)(2)(i)(B), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless information is available which was not available at the time of permit issuance.

XIII. ENDANGERED SPECIES

In the previous permit, the Bald eagle, Mexican spotted owl, the Southwestern willow flycatcher, the Rio Grande silvery minnow, and the black-footed ferret were previously identified. According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, http://ifw2es.fws.gov/EndageredSpecies/lists/, no additional species have been added to the county list since that environmental baseline was established.

Based on those facts, EPA has reviewed the available information regarding impacts of this action on listed species and designated critical habitat. EPA has determined that the issuance of this permit will have "no effect" on listed threatened and endangered species.

XIV. VARIANCE REQUESTS

No variance requests have been received.

XV. ADMINISTRATIVE RECORD

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by 40 CFR 124.9:

A. PERMIT(S)

NPDES Permit No. NM0028436 issued August 26, 2003, with an effective date of October 1, 2003, and an expiration date of October 31, 2005.

B. APPLICATION(S)

EPA Application Form 1 dated March 27, 2005 and Form 2E dated October 28, 2005.

C. CLEAN WATER ACT CITATIONS

Section 101
Section 101(a)(3)
Section 303
Section 304(e)
Section 308
Section 401(a)(1)
Section 401(a)(2)

D. 40CFR CITATIONS

40 CFR Citations Sections 122, 124, 125, 133, 136

E. WATER QUALITY REFERENCES

Pueblo of Pojoaque Water Quality Standards (PPWQS), 1999 revision.

New Mexico State Standards for Interstate and Intrastate Surface Waters, (20.6.4 NMAC, amended through February 16, 2006).

F. MISCELLANEOUS REFERENCES

EPA Region 6 "Policy for Post Third Round NPDES Permitting" and "Post Third Round NPDES Permit Implementation Strategy," October 1, 1992.

Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants 49 FR 9016-9019, March 9, 1984